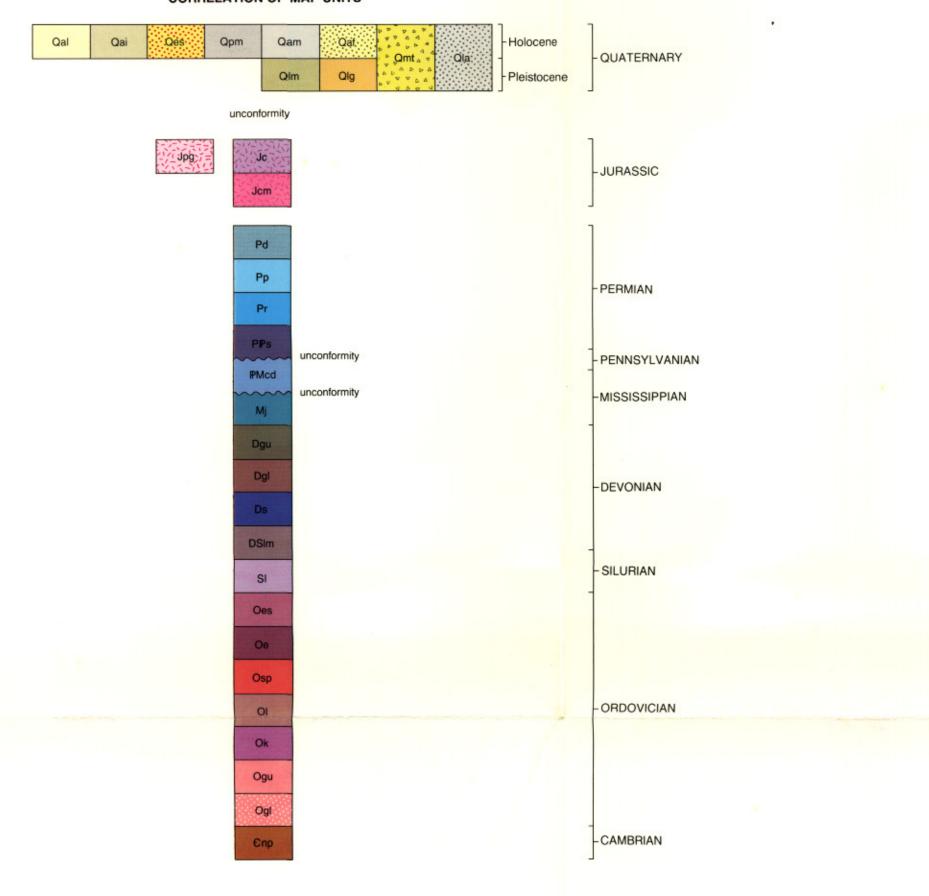
#### CORRELATION OF MAP UNITS



FORMATION		SYMBOL	THICKNESS feet (meters)	LITHOLOGY	
Unnamed dolomite		Pd	400+ (120+)	(-)-(-)-(-)	
Pequop Formation		Рр	1800+ (549+)		
Riepetown Sandstone		Pr	300	7 - 7 2 7 7	
Strathearn Formation		PIPs	200 (60)	200000000000000000000000000000000000000	
Chainman Shale and Diamond Peak Formation, undivided		PMcd	255 (80)		
Joana Limestone		Мј	85 (26)		
	Upper member	Dgu	900+ (274+)		
Guilmette Formation	Lower	Dgl	810+ (247+)		
Simonson Dolomite		Ds	1 170 (:355)		
Lone Mountain Dolomite		DSIm	:370 (:113)		
Laketown Dolomite		SI	380+ (115)		fault
Ely Springs Dolomite		Oes	(85)		
Eureka Quartzite		Oe	4430+ (1130+)		fault
Swan Peak Quartzite		Osp	325+ (1100+)		- restable
Lehman Formation		OI	'440 ([134)		
Kanosh Shale		Ok	:280 (85)		
	Upper	Ogu	4450+ (1137+)		
Garden City Formation	Lower	Ogl	7700+ (2210+)		fault
		-		1-1-1-1-	

#### **DESCRIPTION OF MAP UNITS**

Alluvium (Holocene) — Unconsolidated cobble-and pebble-gravel, sand, and silt deposited within ephemeral stream channels; predominantly fine sand, silt, and clay deposits on playa flats.

Alluvial silt (Holocene) — Thin sheets of unconsolidated, poorly sorted, tan silt with subordinate fine sand and clay. Deposited by streams and sheet floods along margins of playa; gradational into playa mud (Qpm).

Eolian sand (Holocene) — Unconsolidated, brown sand overlying lacustrine, alluvial, and playa deposits. Quartz, feldspar, ooids, and lithic fragments are primary constituents. Forms thin sand sheets and small dunes less than 1.8 meters (6 ft) thick in most places; forms blow-out dunes as much as 6 meters (20 ft) thick near Donner-Reed Pass.

Playa mud (Holocene) - White to tan mud, silt, and Qpm halite deposits of plastic consistency underlying nearly flat expanses east and west of Crater Island.

Alluvial mud (Holocene) — Tan to brown mud and silt in distal parts of alluvial drainage systems. Generally gradational into playa mud (Qpm).

Alluvial fan deposits (Holocene and Pleistocene?) -Unconsolidated, poorly sorted cobble- and pebblegravel, sand, and silt. Deposited as alluvial cones at flanks of mountains and as piedmonts of coalesced alluvial fans at elevations closer to playa flats.

Mass-movement talus (Holocene and Pleistocene) — Blocky, boulder to cobble deposits on steep slopes. Locally includes colluvium.

Ola

and Pleistocene) - Varied, complexly interlayered deposits with lacustrine and alluvial origins. Lacustrine marl (Pleistocene) — White and buff, unconsolidated marl, clay, and silt; bears gastropods and

interbedded and (or) overlying gravel.

Lacustrine and alluvial deposits, undivided (Holocene

ostracods in many locations. Locally includes thin

Lacustrine gravel (Pleistocene) - Moderately to wellsorted pebble, cobble, and sand deposits, with sand and silt matrix. Ranges from unconsolidated to strongly cemented, in places cemented by tufa. Locally

includes poorly exposed underlying marl.

Crater Island Quartz Monzonite (Jurassic) - Light- to

dark-gray, coarse-grained, subequigranular to equi-

granular, biotite-hornblende quartz monzonite.

after augite oikocrysts. Forms dark-colored, low

Porphyritic granodiorite (Jurassic) — Light-gray, porphyritic, biotite granodiorite and monzogranite. Forms light-brown, rounded outcrops in the northern part of the quadrangle.

Underlies gray-brown, rugged hills in much of southern part of the quadrangle. Locally includes: Monzodiorite - Dark-brown, coarse-grained, biotiteaugite monzodiorite to monzonite. Conspicuously poikilitic; biotite, as much as 2 inches across, is

Unnamed dolomite (Permian) - Light-gray, thin-to brown, quartz sandstone. Dolomite contains white chert interbeds or nodules and brown sand laminae.

Forms brown cliffs.

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Pequop Formation of Steele (1960) (Permian) - Darkgray limestone and interbedded brown, sandy limestone forming ledgy steep slopes that typically are striped brown and gray. Limestone dolomitized in many areas. Bioclastic beds common.

Riepetown Sandstone of Steele (1960) (Permian) -Brown, thin- to medium-bedded, calcareous, quartz sandstone and sandy limestone. Forms brown cliffs.

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Strathearn Formation (Permian and Pennsylvanian?) — Well-bedded, brown conglomerate consisting of chert, quartz, sandstone, and limestone clasts in light-gray, clastic, limestone matrix. Forms dark-

Chainman Shale and Diamond Peak Formation, Undivided (Pennsylvanian and Mississippian) - Brown quartz sandstone, gray and green siltstone and shale, and gray quartzite; less common siliceous, quartzchert-quartzite conglomerate. Forms gentle slopes.

Joana Limestone (Mississippian) — Black, thin-bedded, coarse-grained, fossiliferous limestone in upper part and light-gray, massive to thick-bedded limestone in lower part. Forms caps of cliffs and steep slopes underlain by Guilmette Formation (Dgu, Dgl).

Guilmette Formation (Devonian) — Divided into:

Upper member — Thick-bedded to massive, lightgray limestone containing common algal heads and Amphipora. Forms massive light-colored

Lower member - Thick-bedded, black limestone containing common algal heads and Amphipora. Forms steep, ledgy slopes.

Simonson Dolomite (Devonian) — Laminated dolomite with black and light-gray units interlayered on 1.8- to 6-meter scale (6-20 ft); upper part dominantly black and includes limestone beds. Forms ledgy slopes with alternating light and dark colors.

Lone Mountain Dolomite (Devonian and Silurian) -Light-gray to buff, coarse-grained, thick-bedded to massive dolomite. Characteristically laminated or mottled. Forms pale cliffs.

Laketown Dolomiite (Silurian) — Thick-bedded, mottled dolomite. Upper part is dark to medium gray, lower SI part is light gray to buff. Lower part and basal part of upper part contain abundant white chert nodules. Forms steep silopes.

Ely Springs Dolomite (Ordovician) — Black, medium- to thick-bedded dolomite. Upper part mottled. Forms prominent cliffs.

Eureka Quartzite (Ordovician) — White, well-sorted, medium bedded orthoquartzite. Generally weathers to orange-brown patinae. Forms prominent palecolored cliffs.

Swan Peak Quartizite (Ordovician) — Interlayered brown dolomite, gray silty limestone, brown sandy dolomite, and dolomitic quartzite. Unit is lithologically heterogenous on 6- to 18-meter scale (20-60 ft). Forms gentle slopes.

Lehman Formation (Ordovician) — Dark-gray, slightly silty, coarse-grained limestone. Thin-bedded, with distinctive interbeds of ostracod and gastropod coquina. Forms gentle slopes.

Kanosh Shale (Ordovician) — Dark-brown, thin-bedded siltstone and calcareous siltstone. Forms topographic benches.

Garden City Formation (Ordovician) — Divided into:

Upper member - Light- to medium-gray, thickbedded to massive, slightly silty limestone forming steep slopes. Where marbleized, unit is alternating bands of yellow, blue-gray, and dark-gray.

Lower member — Medium-gray and tan, thin-bedded, silty limestone. Forms gentle slopes.

Notch Peak Formation (Cambrian) - Dark-gray to black, medium- to thick-bedded dolomite and limestone. Upper part carries abundant chert nodules. commonly black. Forms cliffs and steep slopes.

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# MAP SYMBOLS

# CONTACT

Dashed where gradational; dotted where covered

**HIGH-ANGLE FAULT** 

Dashed where location inferred; dotted where covered bar and ball on downthrown side; dip indicated

> IGNEOUS DIKE -----

# **IGNEOUS DIKE FILLING FAULT**

ANTICLINE Overturned Upright

STRIKE AND DIP OF BEDDING Inclined Vertical Overturned

TRACE OF LAKE SHORELINE Pilot Valley

STRIKE AND DIP OF FOLIATION

LOCATION OF GEOCHRONOLOGY SAMPLE

See text

LOCATION OF PALEONTOLOGY SAMPLE See text

APPROXIMATE LOCATION OF ABANDONED WATER WELL

5000 3000 Elevation in Feet

Elevation in Feet

